Claims

- 1. A coating for a utensil or vessel for cooking food products, characterized in that it consists of an aluminum-based alloy containing more than 80% by weight of one or more quasicrystalline or approximant phases, having the composition $Al_a(Fe_{1-x}X_x)_b(Cr_{1-y}Y_y)_cZ_zJ_j$ in which:
 - X represents one or more elements isoelectronic with Fe, chosen from Ru and Os;
- Y represents one or more elements isoelectronic with Cr,
 chosen from Mo and W;
 - Z is an element or a mixture of elements chosen from Ti, Zr, Hf, V, Nb, Ta, Mn, Re, Rh, Ni and Pd;
 - J represents the inevitable impurities other than copper;
- 15 a + b + c + z = 100;
 - $5 \le b \le 15$; $10 \le c \le 29$; $0 \le z \le 10$;
 - $xb \leq 2$;
 - yc \leq 2; and
 - j<1.
- 20 2. The coating as claimed in claim 1, characterized in that the quasicrystalline alloy has an atomic composition $Al_aFe_bCr_cJ_i$, in which:
 - a + b + c + j = 100; and
 - $5 \le b \le 15$; $10 \le c \le 29$; j < 1.
- 25 3. A utensil or vessel for cooking food products, characterized in that the surface of said utensil or vessel that is in contact with the food products has a coating as claimed in either of claims 1 or 2.